

ABSTRACT

A linear motor coil assembly (12) comprises a plurality of coils (14) arranged in a line in a direction of movement and having respective coil shafts perpendicular to the direction of movement of the motor is provided. A flat cooling tube (20) is arranged to meander inside the plurality of coils. The cooling tube has a cross section elongated in a direction parallel to the coil axes, and a plurality of clearance holes (25) through which coolant flows are formed inside the cooling tube. The cooling tube has interleaved folds at least equal in number to the number of coils. The coils being fitted into these folds. At the time of manufacture of the coil assembly, the coils are wound around cores that are divided for each coil, and the cores are inserted into the folds of the cooling tube. A method of manufacturing a linear motor assembly having the aforesaid cooling tube is also disclosed.